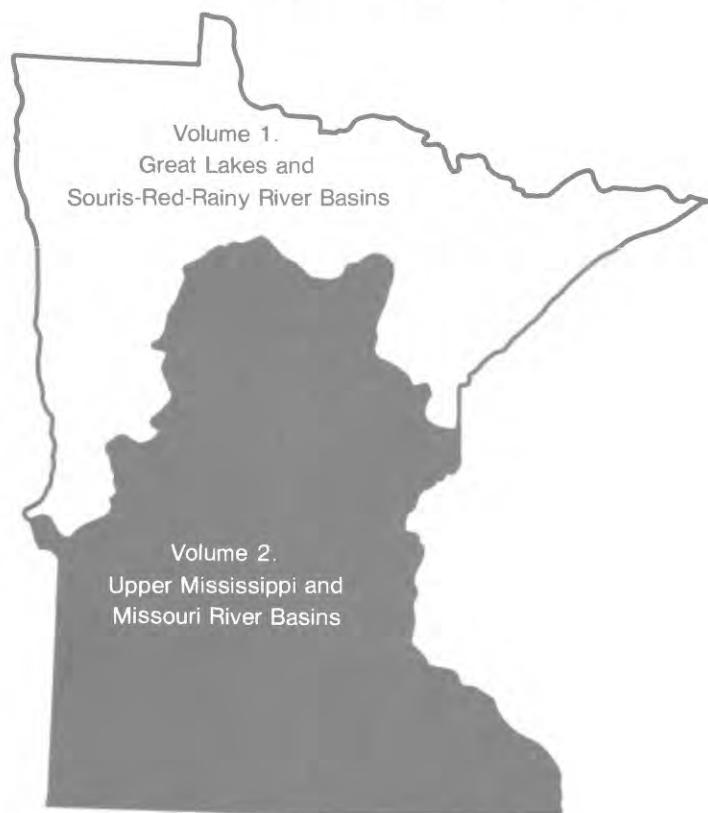




AMERICAN

# Water Resources Data Minnesota Water Year 1982

Volume 2. Upper Mississippi and  
Missouri River Basins



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT MN-82-2  
Prepared in cooperation with the Minnesota Department of  
Natural Resources, Division of Waters; the Minnesota  
Department of Transportation; and with other State,  
municipal, and Federal agencies





























































































































































































































































































































































































































































































































































































































































































































































































































































































































































October 1, 1978

## FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
<i>Length</i>		
inches (in)	$2.54 \times 10^1$	millimeters (mm)
feet (ft)	$2.54 \times 10^{-2}$	meters (m)
miles (mi)	$3.048 \times 10^{-1}$	meters (m)
	$1.609 \times 10^0$	kilometers (km)
<i>Area</i>		
acres	$4.047 \times 10^3$	square meters ( $m^2$ )
	$4.047 \times 10^{-1}$	square hectometers ( $hm^2$ )
square miles ( $mi^2$ )	$4.047 \times 10^{-3}$	square kilometers ( $km^2$ )
	$2.590 \times 10^0$	square kilometers ( $km^2$ )
<i>Volume</i>		
gallons (gal)	$3.785 \times 10^0$	liters (L)
	$3.785 \times 10^0$	cubic decimeters ( $dm^3$ )
million gallons	$3.785 \times 10^{-3}$	cubic meters ( $m^3$ )
	$3.785 \times 10^3$	cubic meters ( $m^3$ )
cubic feet ( $ft^3$ )	$3.785 \times 10^{-3}$	cubic hectometers ( $hm^3$ )
	$2.832 \times 10^1$	cubic decimeters ( $dm^3$ )
cfs-days	$2.832 \times 10^{-2}$	cubic meters ( $m^3$ )
	$2.447 \times 10^3$	cubic meters ( $m^3$ )
acre-feet (acre-ft)	$2.447 \times 10^{-3}$	cubic hectometers ( $hm^3$ )
	$1.233 \times 10^3$	cubic meters ( $m^3$ )
	$1.233 \times 10^{-3}$	cubic hectometers ( $hm^3$ )
	$1.233 \times 10^{-6}$	cubic kilometers ( $km^3$ )
<i>Flow</i>		
cubic feet per second ( $ft^3/s$ )	$2.832 \times 10^1$	liters per second (L/s)
	$2.832 \times 10^1$	cubic decimeters per second ( $dm^3/s$ )
gallons per minute (gal/min)	$2.832 \times 10^{-2}$	cubic meters per second ( $m^3/s$ )
	$6.309 \times 10^{-2}$	liters per second (L/s)
	$6.309 \times 10^{-2}$	cubic decimeters per second ( $dm^3/s$ )
million gallons per day	$6.309 \times 10^{-5}$	cubic meters per second ( $m^3/s$ )
	$4.381 \times 10^1$	cubic decimeters per second ( $dm^3/s$ )
	$4.381 \times 10^{-2}$	cubic meters per second ( $m^3/s$ )
<i>Mass</i>		
tons (short)	$9.072 \times 10^{-1}$	megagrams (Mg) or metric tons

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